



**PvuI (7)**  
**SgfI (6)**
**MfeI (82)** **EcoNI (96)**

1 GGATCTGGATCGCTCCGGTGCCCGTCAGTGGGAGAGCGCACATCGCCACAGTCCCGGAGAAGTTGGGGGAGGGGTGGCAATTGAACGGGTGCCTA  
 101 GAGAAGGTGGCGCGGGTAAACTGGAAAGTGATGTCGTGACTGGCTCCGCCTTTTCCGAGGGTGGGGGAGAACCGTATATAAGTGCAGTAGTCGCC

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**Psp1406I (203)**
**HindIII (245)** **Bsu36I (291)**

201 GTGAACGTTCTTTTTTCGCAACGGGTTTGCCGCCAGAACACAGCTGAAGCTTCGAGGGGCTCGCATCTCTCTTACCGCGCCCGCCGCTACCTGAGGGCC  
 301 GCCATCCACGCGGTTGAGTCGCGTTCTGCCGCTCCCGCCTGTGGTGCTCTGAACTGCGTCCGCCGTCTAGGTAAGTTTAAAGCTCAGGTCGAGACC

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**NgoMIV (441)**

401 GGGCCTTTGTCCGGCGCTCCCTTGAGCGCTACCTAGACTCAGCGGCTCTCCACGCTTTGCTGACCCTGCTTGTCTAACTCTACGCTTTTGTTCGTTT

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**KasI (535)**
**AgeI (552)** **BspHI (568)**

501 TCTGTTCTGCGCCGTTACAGATCCAAGCTGTGACCGGGCGCTACCTGAGATCACCGGTAGGAGGGCCATCATGAAAATTTGAAACCATATATGAGGAAT  
 601 ACATCCATCTCGTCTACTTGTGTTTCTTCTAAACAGTCACTTTTTAACTGAGGCTGGCATTATGTCTTCATTTTGGGCTGTGTCAGTGTAGGTCTCC  
 701 CTAACAGAGGGCAACTGGATAGATGAAGATGACCTGGAGAAAATTGAAAGCCTTATTCATCTATTGACACCACTTTATACACTGACAG  
 801 TGACTTTTCATCCAGTTGCAAAGTTACTGCAATGAACTGCTTCTCCTGGAATTGCAGGTTATTTTACATGAGTACAGTAACATGACTCTTAATGAAACA  
 901 GTAAGAAACGTGCTCTACCTTGCAAACAGCACTCTGTCTTCTAACAAGAATGTAGCAGAATCTGGCTGCAAGGAATGTGAGGAGCTGGAGGAGAAAACCT  
 111 V R N V L Y L A N S T L S S N K N V A E S G C K E C E E L E E K T

1 M K I L K P Y M R N

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**HindIII (1016)**
**MscI (1098)** **NheI (1092)**

1001 TCACAGAGTTTTTGCAAAGCTTTATACGCATTGTCCAATGTTTCATCAACACGTCCTGACTGCACGCGAGCCTCTCCGTGTTTCTGTTATTGCTAGCTG  
 144 F T E F L Q S F I R I V Q M F I N T S •  
 1101 GCCAGACATGATAAGATACATTGATGAGTTTGGACAAACCACAACACTAGAATGCAGTGAAAAAATGCTTTATTTGTGAAATTTGTGATGCTATTGCTTTA

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**HpaI (1230)** **MfeI (1241)**

1201 TTTGTAACCATTATAAGCTGCAATAAACAAGTTAAACAACAATTGCATTCTTTTATGTTTCAGGTTTCAGGGGAGGTGTGGGAGGTTTTTAAAGCA

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**EcoRI (1326)**

1301 AGTAAACCTCTACAAATGTGGTATGGAATTCTAAAATACAGCATAGCAAACCTTAACTCCAAATCAAGCCTCTACTTGAATCCTTTTCTGAGGGATG  
 1401 AATAAGGCATAGGCATCAGGGGCTGTGCCAATGTGCATTAGCTGTTTGCAGCCTCACCTTCTTTCATGGAGTTAAGATATAGTGTATTTTCCAAGGT

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**SapI (1508)**
**SspI (1565)** **SwaI (1579)**

1501 TTGAACTAGCTCTTCATTTCTTTATGTTTTAAATGCACTGACCTCCCACATTCCTTTTTAGTAAAATATTCAGAAAATAATTTAAATACATCATTGCAAT

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**EcoO109I (1640)**

1601 GAAAATAAATGTTTTTATTAGGCAGAATCCAGATGCTCAAGGCCCTTCATAATATCCCCAGTTTAGTAGTTGGACTTAGGGAACAAAGGAACCTTTAA  
 1701 TAGAAATTGGACAGCAAGAAAGCGAGCTTCTAGCTTTAGTTCTGGTGTACTTGAGGGGATGAGTTCCTCAATGGTGGTTTTGACCAGCTTGCCATTCA  
 144 N R T Y K L P I L E E I T T K V L K G N M

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**SacI (1840)**
**BstXI (1869)**

1801 TCTCAATGAGCACAAAGCAGTCAGGAGCATAGTCAGAGATGAGCTCTCTGCACATGCCACAGGGGCTGACCACCTGATGGATCTGTCCACCTCATCAGA  
 119 E I L V F C D P A Y D S I L E R C M G C P S V V R I S R D V E D S  
 1901 GTAGGGGTGCCTGACAGCCAAATGGTGTCAAAGTCTTCTGCCGCTTGTCTCACAGCAGACCAATGGCAATGGCTTCAGCACAGACAGTGCACCTGCCA  
 86 Y P H R V A V I T D F D K Q G N S V A S G I A I A E A C V T V R G

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**StuI (2004)**

2001 ATGTAGGCCTCAATGTGGACAGCAGAGATGATCTCCCACTTGTGCTGATGGCCGCCGACATGGTGTGTTGTCTCATAGAGCATGGTGTATCT  
 52 I Y A E I H V A S I I E G T K T R I A A G V H H K N D E Y L M T I K

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**XmnI (2146)**

2101 TCTCAGTGGCGACCTCCACCAGTCCAGATCCTGCTGAGAGATGTTGAAGTCTTCATGGTGGCCCTCTATAGTGTGATTATACTATGCCGATAT  
 19 E T A V E V L E L D Q Q S I N F T K M

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**AseI (2212)**
**SacI (2269)**

2201 ACTATGCCGATGATTAATTGTCAAACAGCGTGGATGGCGTCTCCAGCTTATCTGACGGTTCATAAACGAGCTCTGCTTATATAGACCTCCCACCGTAC

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**SpeI (2367)**

2301 ACGCCTACCGCCATTTGCGTCAATGGGCGGAGTTGTTACGACATTTTGGAAAGTCCGTTGATTTACTAGTCAAAAACAACTCCATTGACGTCAATG

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**SnaBI (2495)**

2401 GGGTGAGACTTGAAAATCCCCGTGAGTCAAACCCTATCCACGCCATTGATGACTGCCAAAACCGCATCATCATGTAATAGCGATGACTAATACGT  
 2501 AGATGACTGCCAAGTAGAAAAGTCCATAAGGTCATGACTGGGCATAATGCCAGGCGGCCATTTACCGTCAATTGACGTCAATAGGGGGCGTACTTGG

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**NdeI (2600)**

2601 CATATGATACACTTGATGACTGCCAAGTGGGAGTTTACCGTAAATACTCCACCATTGACGTCAATGGAAAGTCCCTATTGGCGTTACTATGGGAACA

PacI (2786)

PstI (2779)

SdaI (2778)

BspLU11I

2701 TACGTCATTATTGACGTCAATGGGCGGGGTCGTTGGGCGGTACGCCAGGCGGGCCATTTACCGTAAGTTATGTAACGCCTGCAGGTTAATTAAGAACAT  
2801 GTGAGCAAAGGCCAGCAAAGGCCAGGAACCGTAAAAAGGCCGCTTGTGGCGTTTTTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGA  
2901 CGCTCAAGTCAGAGGTGGCGAAACCCGACAGGACTATAAAGATACCAGGCGTTTTCCCTGGAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCTGCCGC  
3001 TTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCATAGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCCGCTCAA

ApaLI (3110)

3101 GCTGGGCTGTGTGCACGAACCCCGTTACGCCGACCGCTGCGCCTTATCCGGTAACTATCGTCTTGAGTCCAACCCGGTAAGACACGACTTATCGCCA  
3201 CTGGCAGCAGCCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAGAGTTCTTGAAGTGGTGGCCTAACTACGGCTACACTAGAAGAA  
3301 CAGTATTTGGTATCTGCGCTCTGCTGAAGCCAGTTACCTTCGGAAAAAGAGTTGGTAGCTCTTGATCCGGCAAACAAACCACCGCTGGTAGCGGTGGTTT  
3401 TTTTGTGGCAAGCAGCAGATTACGCGCAGAAAAAAGGATCTCAAGAAGATCCTTTGATCTTTTCTACGGGGTCTGACGCTCAGTGGAACGAAAACTCA

EagI (3546)

PacI (3526) SwaI (3535)

NotI (3545)

3501 CGTTAAGGGATTTTGGTCATGGCTAGTTAATTAACATTTAAATCAGCGGCCGAATAAAATATCTTTATTTTCATTACATCTGTGTGTTGGTTTTTTGTG  
3601 TGAATCGTAACTAACATACGCTCTCCATCAAACAAAACGAAACAAAACAACTAGCAAATAGGCTGTCCCCAGTGCAAGTGCAAGTGCCAGAACATTT  
3701 CTCTATCGAA